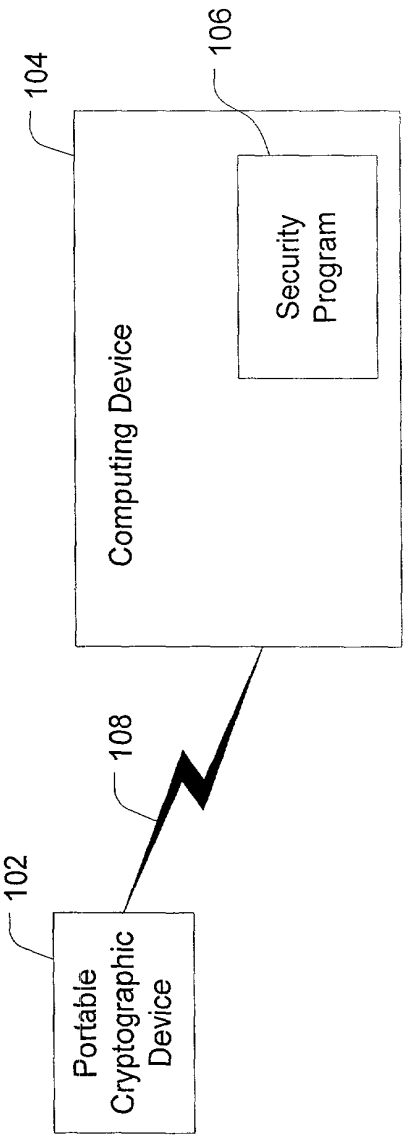
104
106
Computing Device
Security Program
108
102
Portable Cryptographic Device

Fig. 1

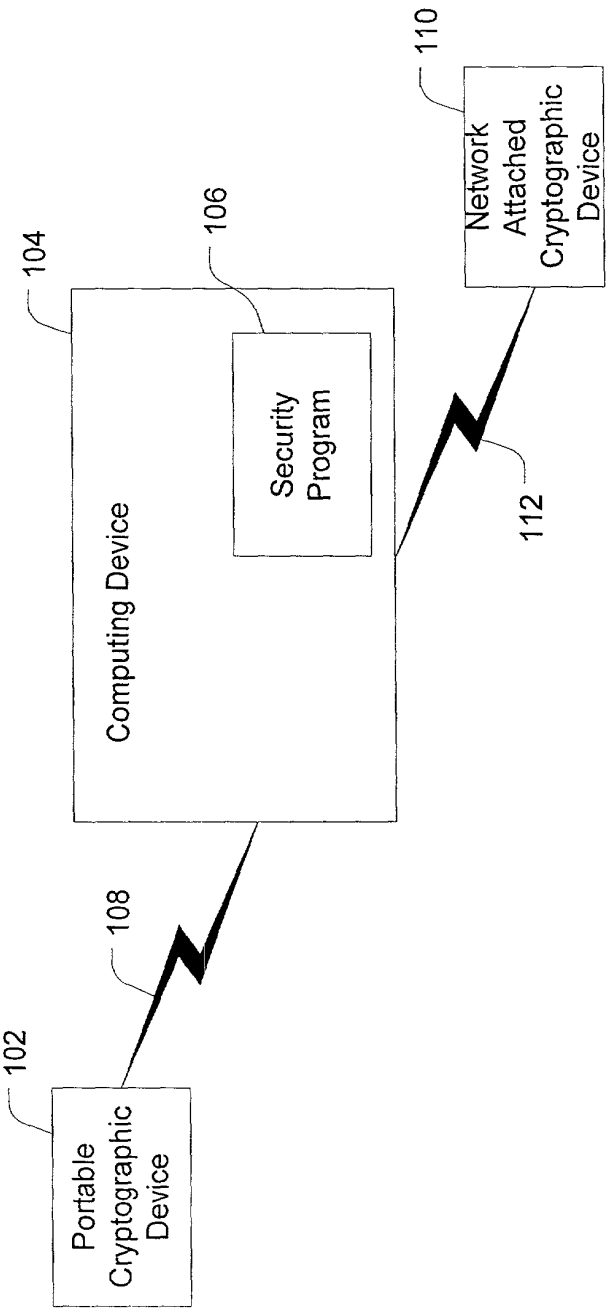
102
Portable Cryptographic Device
108
104
Computing Device
106
Security Program
110
Network Attached Cryptographic Device
112

Fig. 1A

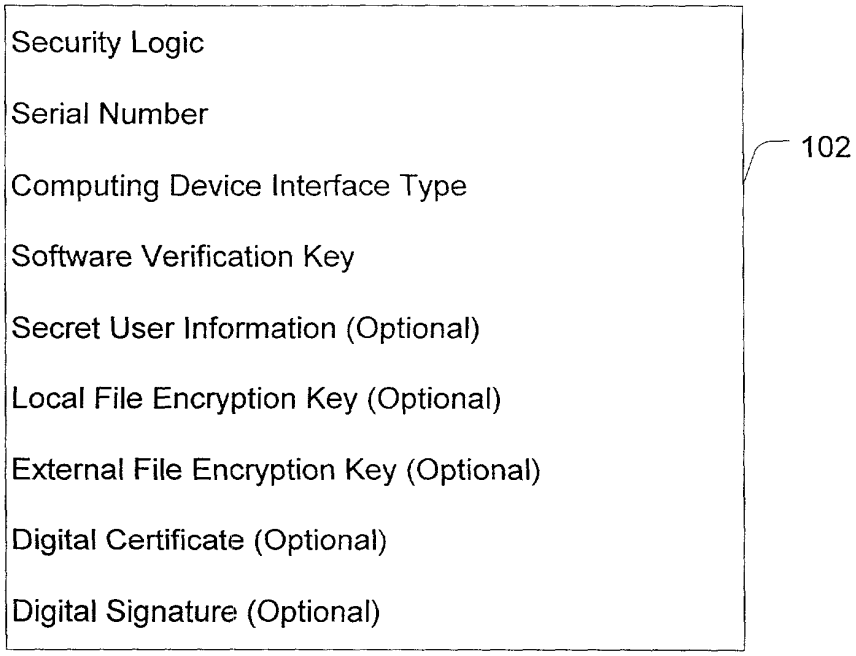
Security Logic
Serial Number
Computing Device Interface Type
Software Verification Key
Secret User Information (Optional)
Local File Encryption Key (Optional)
External File Encryption Key (Optional)
Digital Certificate (Optional)
Digital Signature (Optional)
102

FIG. 2

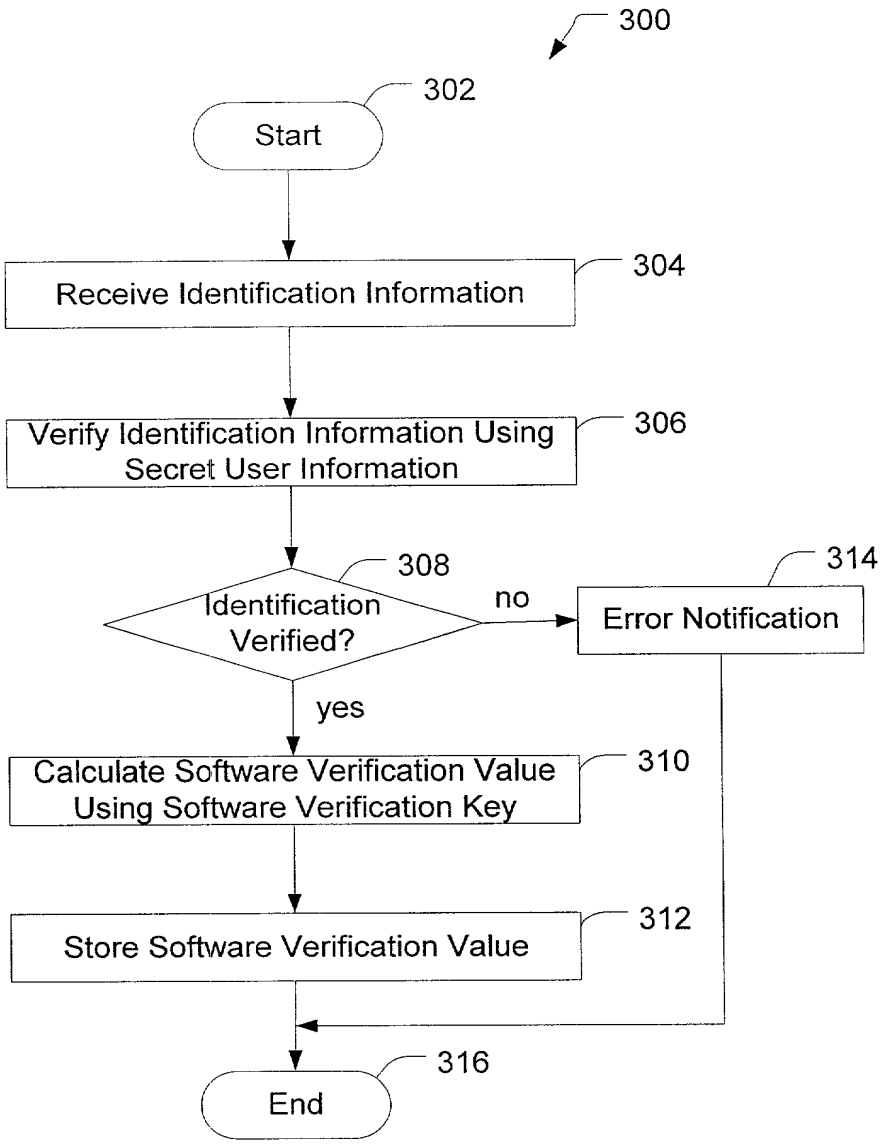
300
302
Start
304
Receive Identification Information
306
Verify Identification Information Using Secret User Information
308
Identification Verified?
no
314
Error Notification
yes
310
Calculate Software Verification Value Using Software Verification Key
312
Store Software Verification Value
316
End

FIG. 3

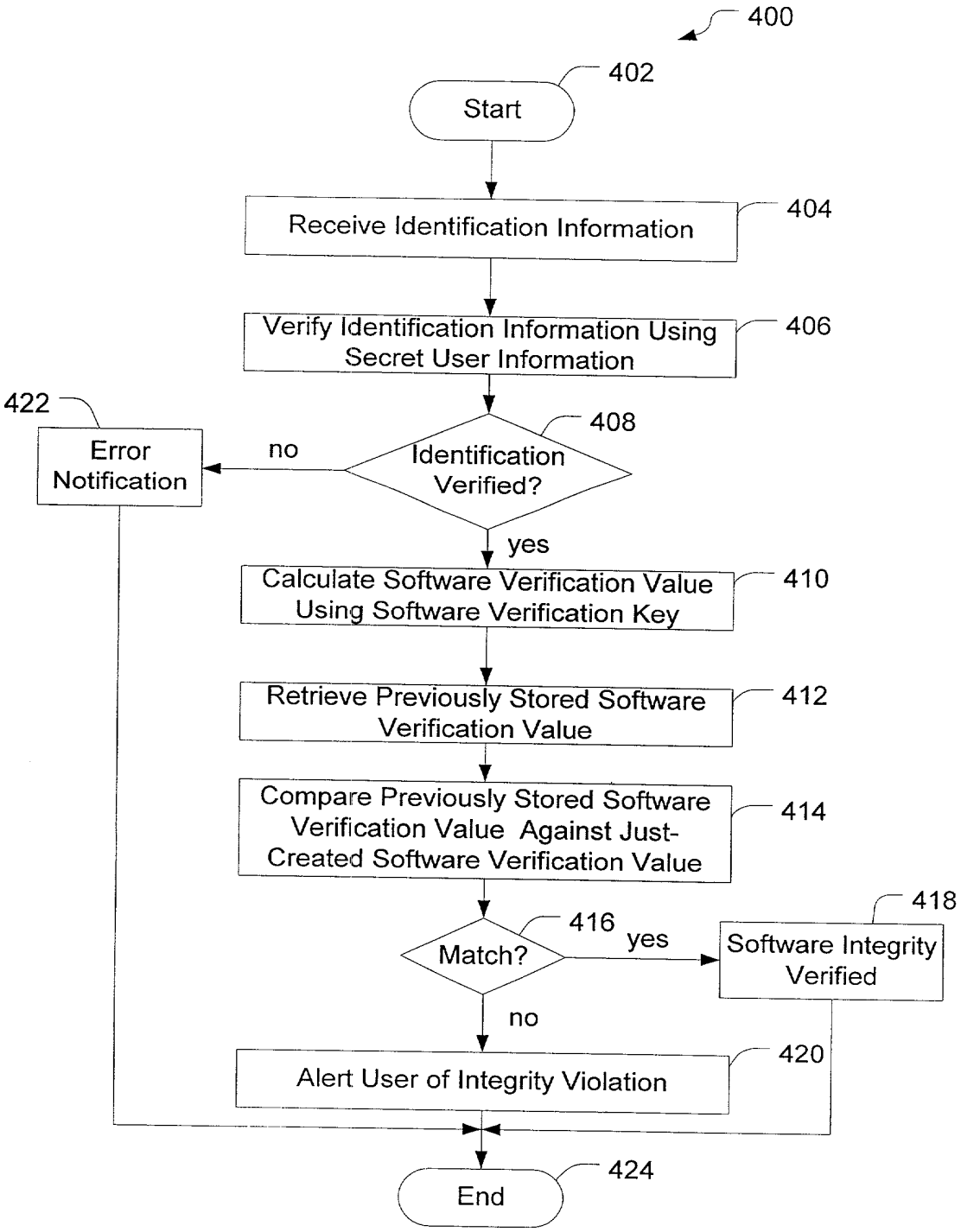
400
402
Start
Receive Identification Information
404
Verify Identification Information Using Secret User Information
406
422
Error Notification
no
408
Identification Verified?
yes
Calculate Software Verification Value Using Software Verification Key
410
Retrieve Previously Stored Software Verification Value
412
Compare Previously Stored Software Verification Value Against Just-Created Software Verification Value
414
418
416
Match?
yes
Software Integrity Verified
no
Alert User of Integrity Violation
420
424
End

FIG. 4